

**Testimony of
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U.S. Department of Homeland Security
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Committee on Government Reform
Subcommittee on Regulatory Affairs
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Good morning Chairman Miller, Ranking Member Lynch and Subcommittee Members. I am Janet Odeshoo, Deputy Director of the U.S. Department of Homeland Security's Federal Emergency Management Agency Region V office in Chicago. I appreciate the opportunity to appear today before the Subcommittee on Regulatory Affairs.

I am a career FEMA employee with over 25 years of experience in emergency management and have served several lengthy assignments as Acting Regional Director. I am aware of the controversy concerning our remapping of flood risk in St. Clair County and recently received a copy of Michigan House Resolution No. 158 urging FEMA, and I quote, "... to reject proposed revisions to floodplain elevation thresholds in St. Clair, Bay and Huron counties." That document discusses the economic hardship that must be borne by those required to buy flood insurance.

It is our belief, based on prior experience working first- hand with flood disaster victims, that uninsured flood damage causes far greater economic hardship.

Flood insurance is an effective way to both financially protect buildings at risk of flooding, as well as to encourage more risk-averse behavior. At its core, buying or requiring flood insurance is a risk management decision. Sound risk management decisions can only be made when people are aware of the risks and understand the severity of the threat they face. Failure to

recognize flood hazards encourages complacency and condones behaviors that create even more risk.

FEMA is committed to providing the best available flood risk data based upon the best available science. Flood Insurance Rate Maps provide flood risk information so that local officials, emergency managers, community planners, public works departments, business owners, homeowners and others can use it to take appropriate actions to both protect their communities and their families from flood damage, as well as to adequately insure their property.

In order to understand the current remapping situation in St. Clair County, I will first provide some background information on the National Flood Insurance Program (which I will refer to as the NFIP) and FEMA's Flood Map Modernization program (which I will refer to as Map Mod). Then I will talk more specifically about remapping and flood insurance.

Congress established the NFIP with the passage of the National Flood Insurance Act in 1968. The NFIP is based on an agreement between local communities and the federal government. If a community will implement a floodplain management program and regulate new development to mitigate future flood damage, the federal government will make flood insurance available to protect the financial interests in buildings previously constructed "in harm's way" – before the risk was mapped. The NFIP was created to reduce our nation's vulnerability to flooding by identifying flood risks, encouraging sound floodplain management practices, and providing a mechanism through which people can insure their investments. With very few exceptions for the high-end market, the NFIP provides the only affordable flood insurance for most homeowners and small businesses.

The NFIP is a common sense program. The key issue is how the NFIP **identifies** flood risk. If science can predict where it will flood and how much flooding is likely to occur, we should use that information to assure that new structures are safely built and our investments in older "at-risk" structures are protected with insurance.

FEMA administers the NFIP and is responsible for providing the best flood risk information available to local communities in the form of Flood Insurance Rate Maps and Flood Insurance Studies. The maps are the foundation of the NFIP. Communities that choose to participate in the NFIP

must adopt flood protection regulations within the flood risk zones identified as Special Flood Hazard Areas (SFHA) on the Flood Insurance Rate Maps.

Although flood insurance is available to owners of all buildings located within participating communities, the purchase of flood insurance is required on only those structures in the SFHA. Prompted by lessons learned from major disasters, the Flood Disaster Protection Act of 1973 and the National Flood Insurance Reform Act of 1994 amended the original 1968 Act to include provisions directing federally insured or regulated lending institutions to require the purchase of flood insurance on loans secured by buildings located in Special Flood Hazard Areas. Federally insured or regulated lending institutions do in some cases require the purchase of flood insurance as a condition of a mortgage for buildings outside the SFHA, but such requirements are not mandated by the Federal government.

FEMA has produced two publications that provide a great deal of information on the NFIP. They are the *NFIP Program Description* and *Answers to Questions on the National Flood Insurance Program*. Both are available on our Web site at www.fema.gov. I have about 100 copies of each here today for those that are interested.

As a result of a requirement in the National Flood Insurance Reform Act of 1994, FEMA has undertaken a massive effort to update and modernize our Flood Insurance Rate Maps. Several flood risk zones are identified on these maps, based upon detailed hydrologic and hydraulic analyses. The Special Flood Hazard Area is defined as the area of land that is subject to inundation by a flood with 1-percent-annual-chance of occurrence in any given year. It is also called the “the 100-year flood” or the “Base Flood.” Base Flood Elevations (referred to as BFEs) are shown on the Flood Insurance Rate Maps for areas in which they have been determined. The BFE is the elevation above sea level that floodwater would reach during the 1-percent-annual-chance flood event and is the national standard that has been adopted by the NFIP as the basis for flood risk identification.

In 1973, the Senate Committee on Banking, Housing and Urban Affairs, which has oversight responsibility for the NFIP, heard arguments on the appropriateness of the 100-year base flood standard. The Committee concluded that the 1-percent-annual-chance flood was reasonable and consistent with national objectives in reducing flood losses. In 1981, the Office of Management and Budget directed FEMA to review the use of the 1-percent-annual-chance flood as part of the President’s 1981 Task Force on

Regulatory Relief. Responses from the public and private sector overwhelmingly supported FEMA use of the Base Flood standard.

Many of the nation's flood risk maps need to be updated. There are 19 individual communities located in St. Clair County that have voluntarily joined the NFIP and most of them have flood risk data that is more than 25 years old. Although old data is not necessarily inaccurate, several factors, including development and new construction, can impact the floodplain. As I will discuss, the science indicates that there is somewhat more flood risk associated with the Great Lake and Lake St. Clair than was known when most of the Flood Insurance Rate Maps for communities in this area were published.

In 2003, FEMA launched the Flood Map Modernization Program, called Map Mod, which aims to update and modernize the nation's Flood Insurance Rate Maps over a six-year period. We are very grateful to Members of Congress for their support of this ongoing, and very important effort. The revised maps will be based on state-of-the-art technology, on-the-ground intelligence, and a strong set of mapping guidelines, specifications, and standards to deliver reliable data and maps, and to do so in a digital geographic information system (GIS) format.

In this State, we are partnering with the Michigan Department of Environmental Quality (DEQ) for the implementation of the National Flood Insurance Program, as well as for the implementation of Map Mod. In 2002, the Michigan DEQ provided us with a plan that prioritized the mapping needs for all of the State's counties. Six of the top 10 counties identified in that plan are subject to Great Lakes system flooding. St. Clair County was sequenced ninth among the 83 Michigan counties for Map Mod re-mapping.

The Base Flood Elevations for waterways in the Great Lakes system that are shown on the old, existing Flood Insurance Rate Maps, were derived from data compiled by the U.S. Army Corps of Engineers in a report they published in 1977. FEMA Region V funded the U.S. Army Corps of Engineers - Detroit District to update that report in the late 1980s. The result of that analysis is called the *Phase I – Revised Report on Great Lakes Open-Coast Flood Levels*, published in 1988. A companion report, *Phase II*, also published in 1988, revised BFEs for the St. Clair River and other connecting waterways. Since the Anchor Bay portion of Lake St. Clair has somewhat different dynamics than the open lake, the State of Michigan

contracted with the Corps of Engineers to do a separate study on expected flood elevations on Anchor Bay. That analysis was completed in 1989. Unfortunately, a lack of funding prevented us from updating the Flood Insurance Rate Maps for communities at the time to reflect this flood risk data. However, these reports represent the best available data that we have for the Great Lakes region; and, with Map Modernization, that new data will be incorporated into the digital flood hazard mapping products that we are now producing.

In January 1989, FEMA's National Office sent letters along with copies of the *Phase I* and *Phase II* reports to all impacted communities informing them that those reports are the "best data available" and that communities participating in the NFIP should use this information for floodplain management purposes. The Michigan Department of Environmental Quality also has required the use of the 1988 reports and the Anchor Bay study as the best available information.

After a meeting in Clay and Ira townships in 2003, we asked the U.S. Army Corps of Engineers - Detroit District to review their *Phase I* and *Phase II* reports to determine if adding recent gage data reflecting the cyclically low lake levels would significantly alter the results of the analysis published in 1988. The Corps concluded that, although lake levels have been cyclically low, recent lows are not record lows and their review of the data suggested that incorporating water levels since 1986 would not yield results significantly different from those published in 1988.

Along the Great Lakes, there is a well-documented historical cycle of lake level fluctuations. As can be seen by this historical information, even though the lake levels are currently low, they will eventually rise. Therefore, in order to protect new and substantially improved buildings from the high water levels that we know will occur again, local building regulations must be based on analyses that take the lake level fluctuations into account. Similarly, the mandatory flood insurance purchase requirement that protects the financial interest of the lender and borrower must account for the full potential risk.

The decision to map or not to map flood risk zones cannot be based on the perceived economic impact of the cost of flood insurance. It must be based on risk, and the risk must be based upon science. Valid scientific methods and the best available data were used in the 1988 *Phase I* and *Phase II* and

the Anchor Bay reports. Although we anticipate little change in expected flood elevations, we have asked the Corp of Engineers to validate the 1989 Anchor Bay analysis to incorporate the additional gage data from 1988 to the present to determine its impact on Base Flood Elevations. That re-analysis should be available to use in the preparation of the revised St. Clair County Flood Insurance Rate Maps.

The final, new digital mapping products generated as part of Map Mod have another major benefit. In the past, revised Flood Insurance Rate Maps (called FIRMs) were prepared using traditional, but now obsolete, cartographic methods. The new FIRMs will be digital in a GIS format. Revisions to incorporate newer data will be much faster and more cost-effective. Whereas, before Map Mod, most map revisions were by “letter,” future revisions will be incorporated into the digital document and will be available on our Web-based platform. This represents the next generation in the quality and availability of flood risk mapping.

Discussions of mapping are easier when they can be visualized. Macomb County is adjacent to St. Clair County and is further along in the remapping process. The display boards provide examples of the old and revised FIRMs in the St. Clair Shores area. We have added information on the revised map to make it easier for you to compare the limits of the old and new floodplain boundaries. The revised map identifies the floodplain based upon data in the Corp’s Phase I report, adjusted to the new North American Vertical Datum of 1988. Please note that although the floodplain now includes some structures that were not located in the floodplain before, using better topographic data has allowed us to remove many structures that had previously been identified in the floodplain. The Macomb County FIRM will become effective on September 29th of this year.

To briefly return to the topic of mapping data, we have obtained a report by the International Joint Commission (IJC) that has been referenced by Clay Township officials as refuting the *Phase I* and *Phase II* reports. We met with technical experts from the U.S. Army Corps of Engineers - Detroit District, the Michigan Department of Environmental Quality, and our study contractor to discuss the Corps *Phase I* and *II* and the International Joint Commission reports on Thursday, April 13. Lake levels identified in the IJC report do not meet FEMA guidelines and specifications for mapping. The Corp’s Revised Phase I and II reports continue to be the best information currently available to identify flood risk along the Great Lakes. It is our

understanding that the Corps testimony will **address the technical merits of these reports in some detail.**

The last topic for my discussion today is casualty insurance. Insurance is a hedge against financial calamity. People who receive flood insurance claims after flood events are far better off than those who must rely on supplemental disaster assistance. Even outside the Special Flood Hazard Area, the risk of flooding is greater than the risk of fire. No one argues the wisdom of buying fire insurance. Yet, statistically, within a floodplain there is a 9% chance of fire vs. a 26% chance of experiencing a flood loss during a typical 30-year mortgage.

Some people contend that the need to buy flood insurance negatively impacts property values. We have not yet seen any study or research indicating that the requirement to purchase flood insurance negatively impacts property values. It is the inability to repair flood damage that has the most impact on market values and flood insurance provides the means to allow owners to repair flood damage.

The NFIP does have provisions for policy rating that may be of interest to homeowners that may be located within flood risk zones in the future. The “Grandfather Rule” recognizes policyholders who have remained loyal customers of the NFIP by maintaining continuous coverage and/or who have built in compliance with the FIRM. We have a handout that discusses the NFIP Map & Zone Grandfather Rules. We encourage policyholders and their insurance professionals to learn about the Grandfathering Rule and how it can benefit in the insurance premium calculation for a building.

To conclude, the science indicates that there is somewhat more flood risk associated with the Great Lake and Lake St. Clair than was known when most of the Flood Insurance Rate Maps for communities in this area were published. FEMA is responsible for providing the best available flood risk information to communities. Do floodplains and flood risks change? Certainly they do. Changes in climate and the engineering of inlets, outlets and diversions can impact lake levels, construction of new neighborhoods, retail establishments, and roads can impact the flow and absorption rate of rain and how we use the shoreline can exacerbate or mitigate the potential of future flood damage.

FEMA re-mapping will use the best science available to model the risk, and then present that information to communities so they can use it to guide development **and** protect their citizens. When better data becomes available, the new digital mapping format will allow us to easily revise the maps to incorporate new modeling that meets NFIP Guidelines and Specifications.

Ignoring or minimizing flood risk serves no useful purpose. Our communities and citizens benefit from ***knowing*** the valuable information they need to make responsible risk management decisions.

FEMA Region V remains committed to providing the best available flood risk data that we can, using the financial resources provided by the Congress in support of Map Mod to produce the best maps we can.

Thank you for providing the opportunity to share these views today. I will be happy to answer any questions that you may have.